

# Optimising the sintering process at Port Kembla using real time feed composition and moisture measurement.

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## **ABSTRACT**

BlueScope Steel has traditionally controlled product sinter chemistry via a feedback SPC scheme utilising four hourly XRF product chemistry. While stable sinter chemistry could be achieved with consistent bed blending, variations in practise or contamination issues typically resulted in long periods to regain stability. To improve the chemical stability a Thermo Scientific CB Omni Fusion online analyser was installed following the mixing and rolling drum, measuring the full green feed to the sinter plant and allowing a much shorter control loop. Limestone and manganese ore PID control has been fully commissioned for continuous control. Additionally, a low frequency microwave (LFM) moisture meter was installed and is currently being trialled for automatic moisture control. Continuous measurement also provides additional value by detecting unexpected events such as raw material contamination and optimising transitions across blended pile changes. Case study examples and results will be presented.